

1/18

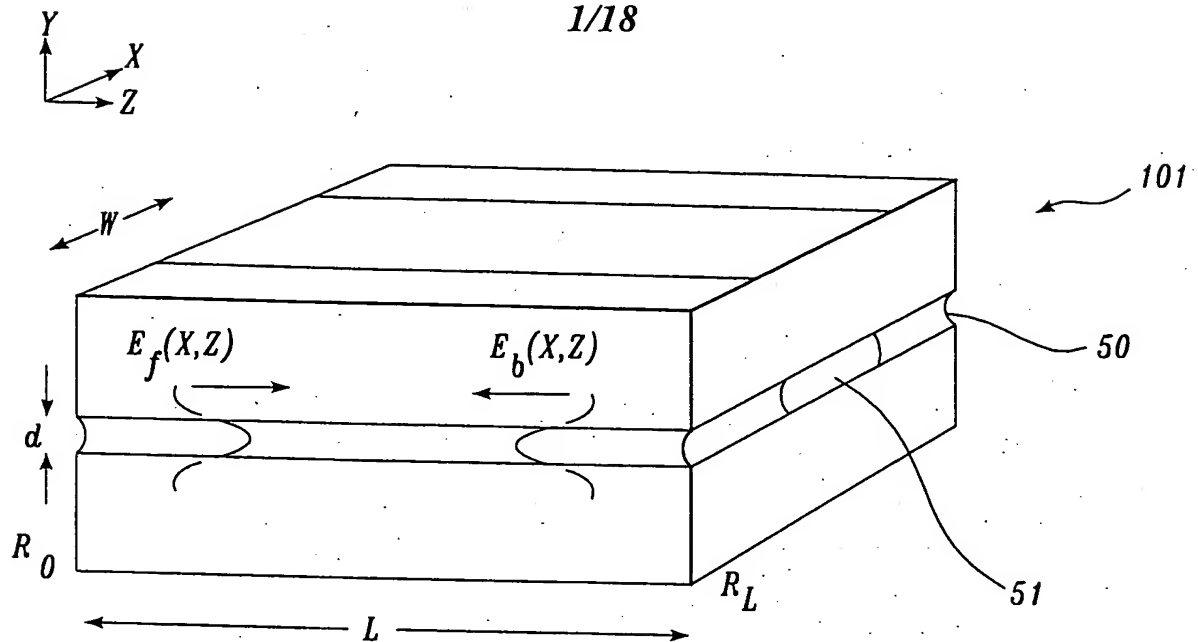


Fig. 1A.

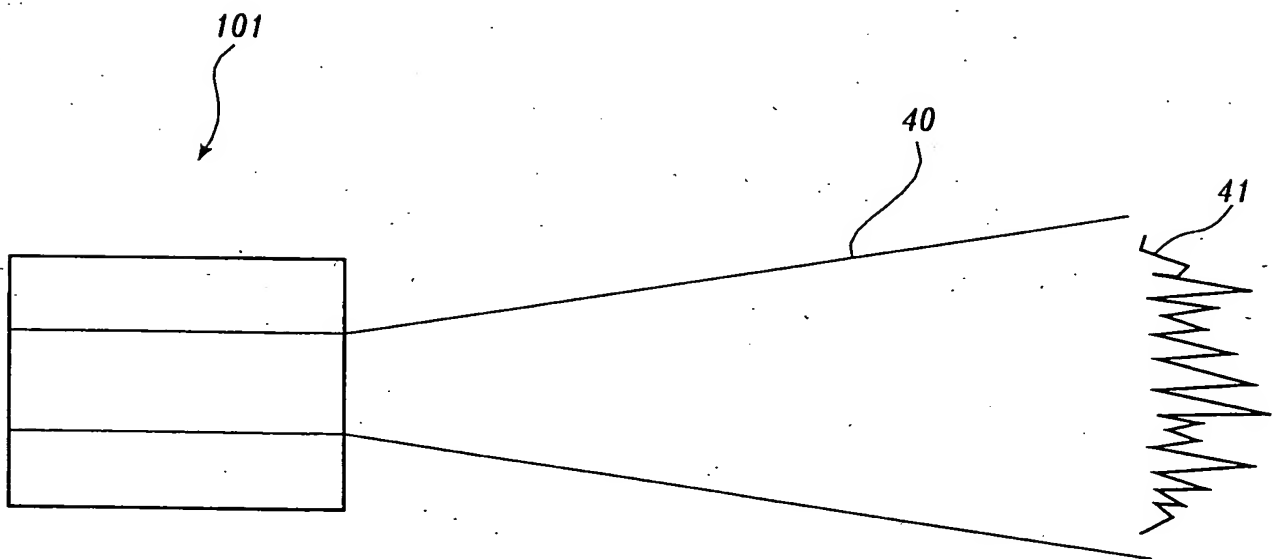


Fig. 1B.

2/18

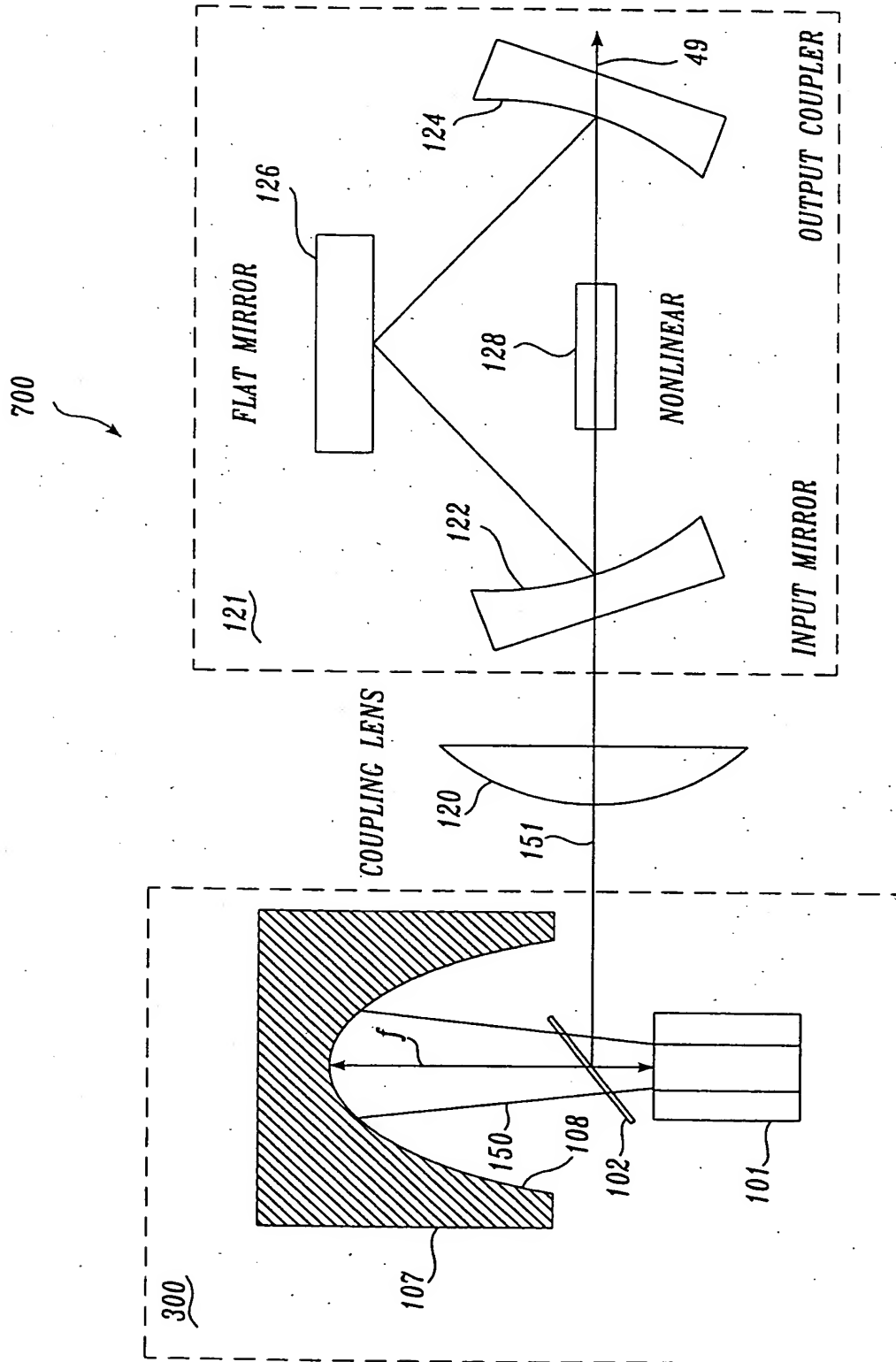


Fig. 2A.

3/18

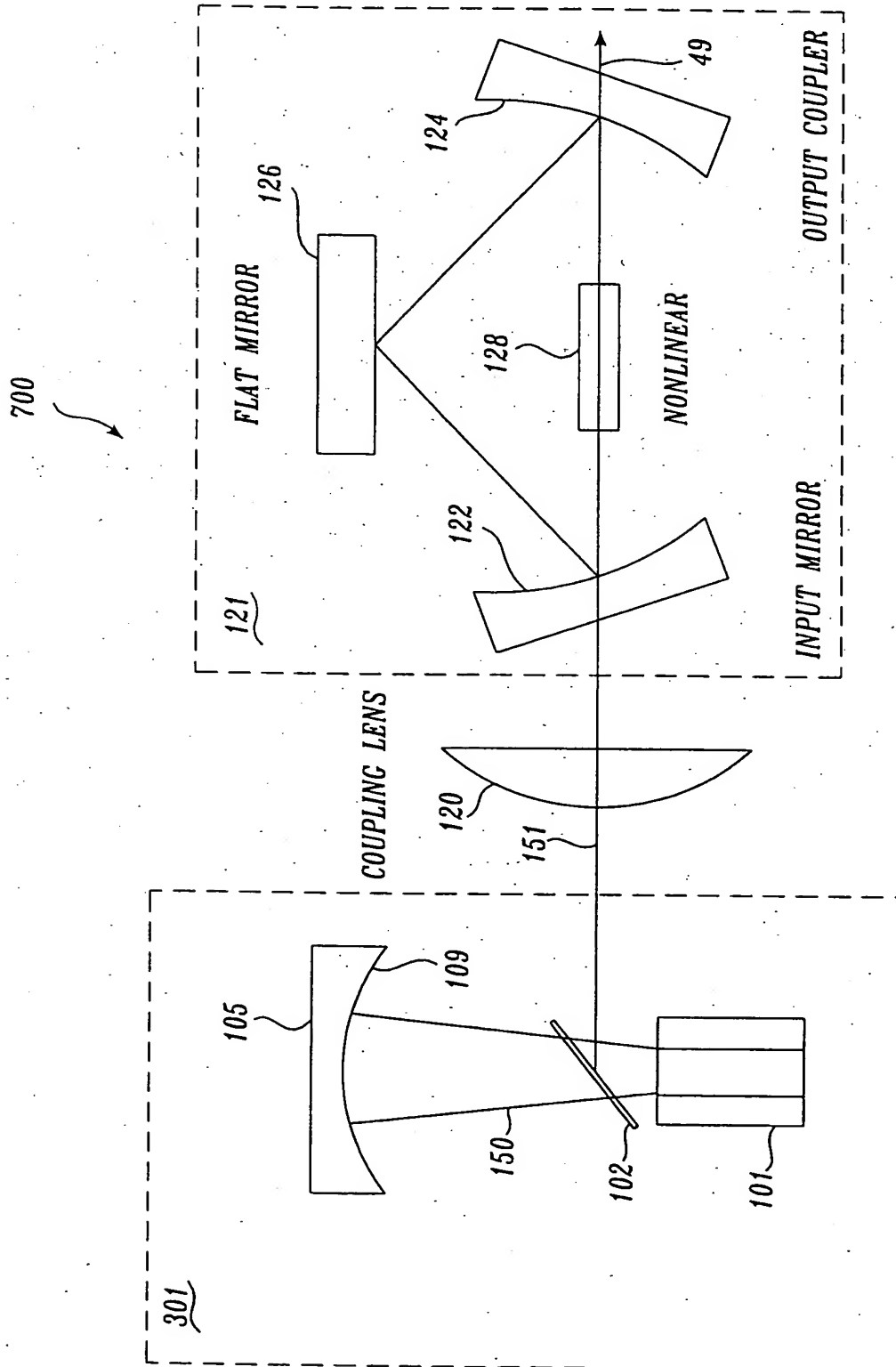


Fig. 2B.

4/18

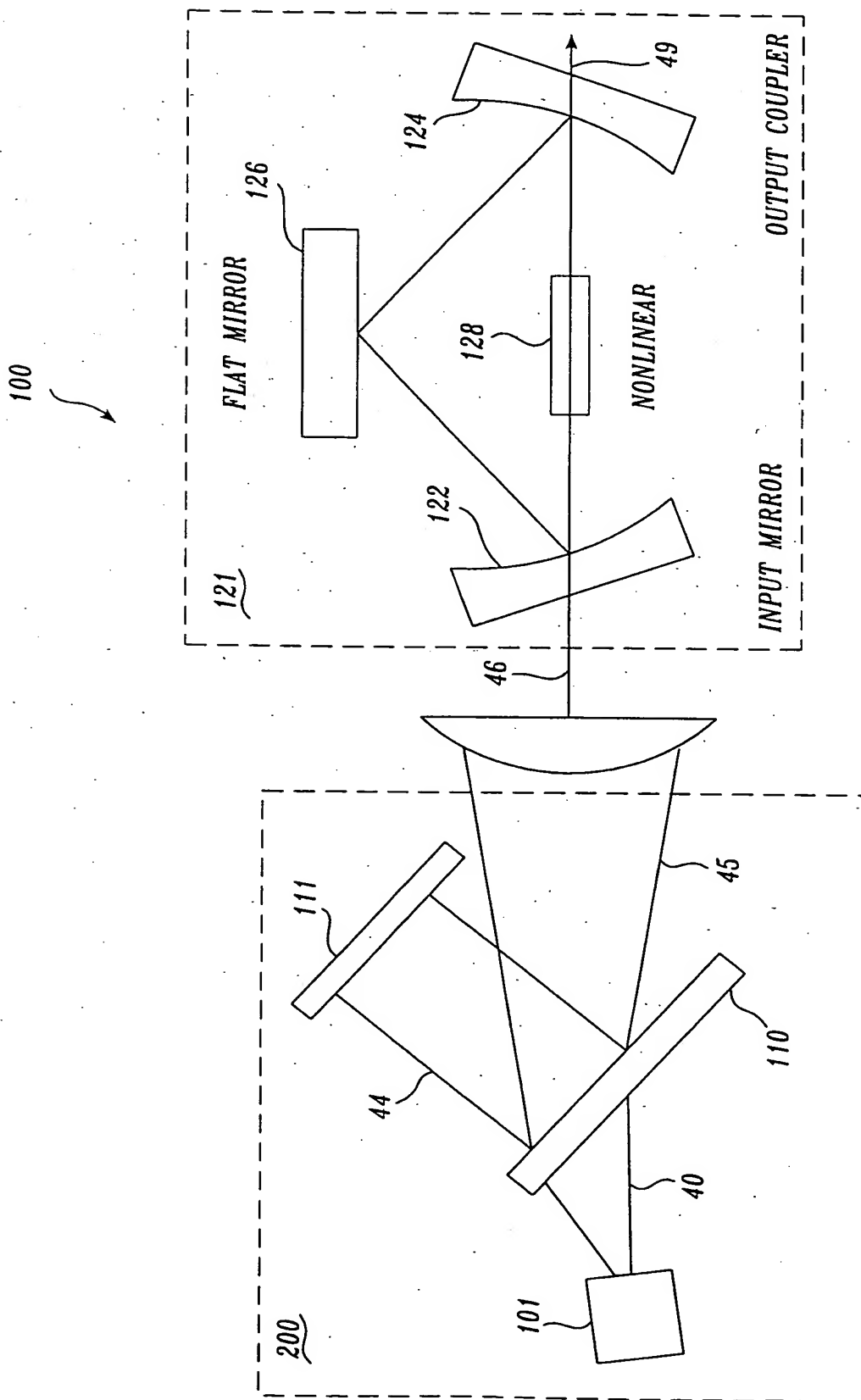


Fig. 3.

5/18

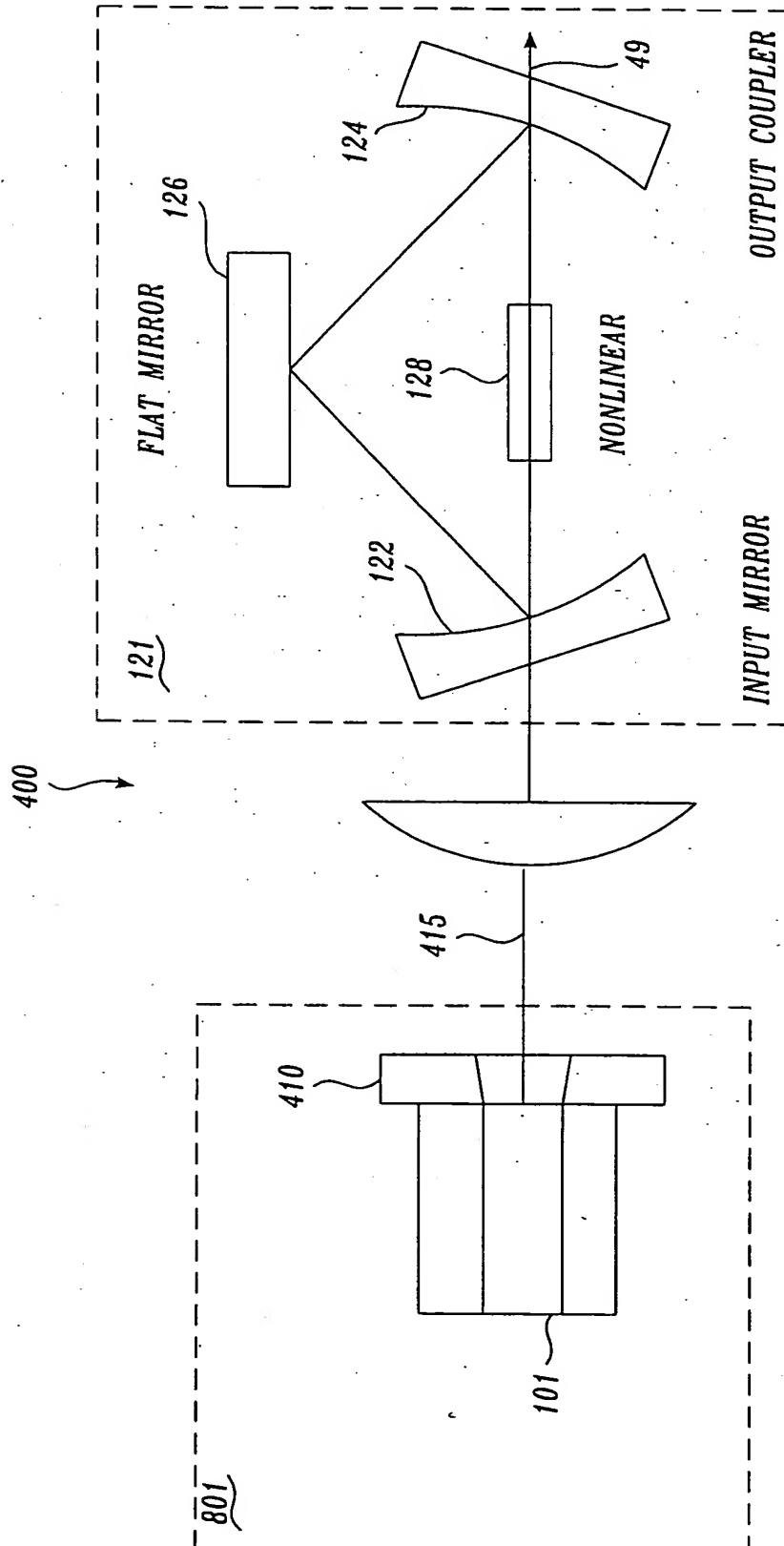


Fig. 4.

6/18

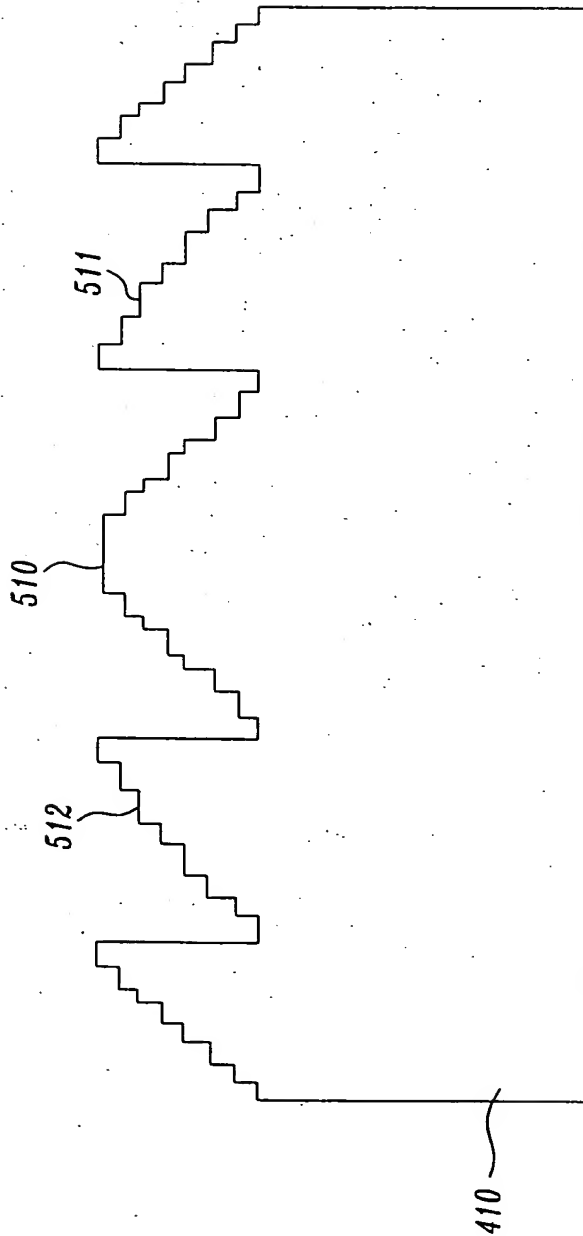


Fig. 5.



8/18

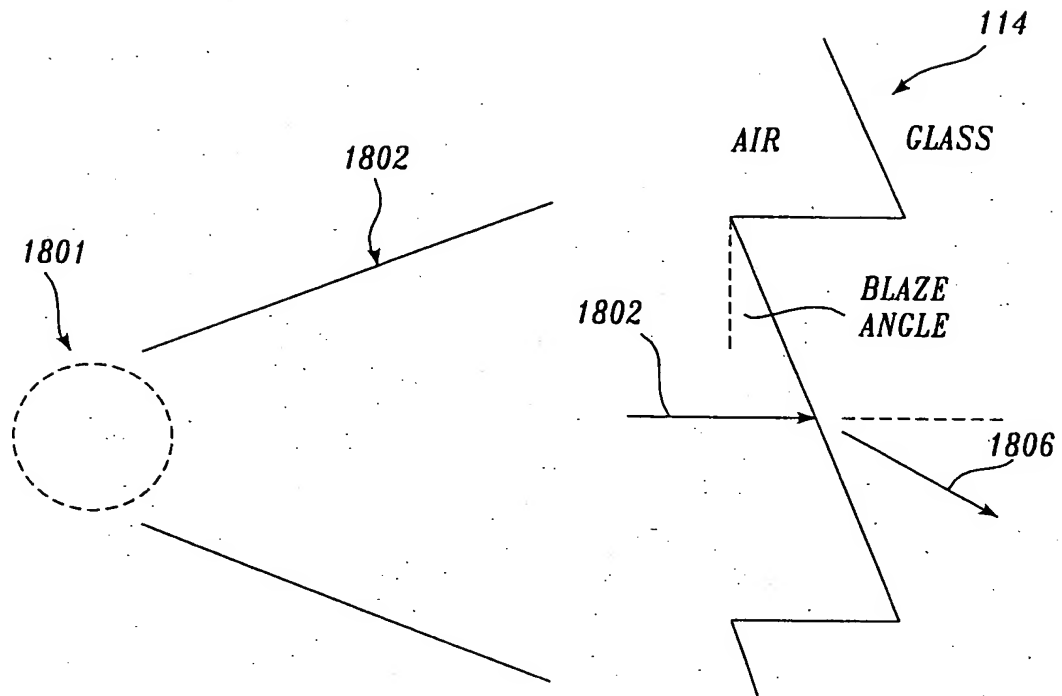


Fig. 7A.

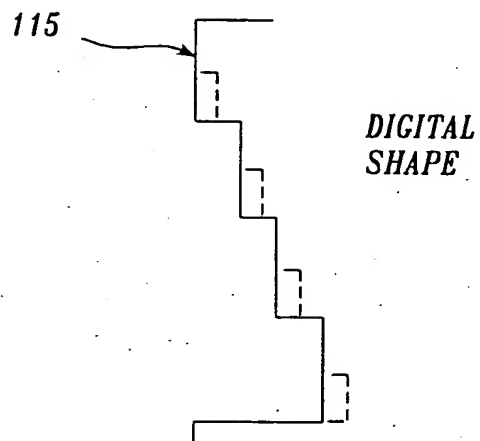


Fig. 7B.

9/18

PHYSICAL QUANTITY	SYMBOL	VALUE
LASER WAVELENGTH	λ	980 nm
GAIN REGION LENGTH	L	250 μm
CONTACT STRIPE WIDTH	w	100 μm
ACTIVE LAYER THICKNESS	d	1 μm
TRANSVERSE CONFINEMENT FACTOR	Γ	0.2
FACET REFLECTIVITIES	$R_0 R_L$	0.05
EFFECTIVE INDEX	n_{eff}	3.5
KERR COEFFICIENT	n_2	0.0
LINEWIDTH-ENHANCEMENT FACTOR	α	3.0
INTERNAL LOSS	α_{int}	1000 m^{-1}
GAIN CROSS SECTION	α	1.5 $\times 10^{-20} \text{m}^2$
DIFFUSION CONSTANT	D	0.0033 m^2/s
TRANSPARENCY CARRIER DENSITY	N_0	1.0 $\times 10^{24} \text{m}^3$
NON-RADIATIVE LIFETIME	τ_{nt}	5ns
SPONTANEOUS-EMISSION COEFFICIENT	B	1.4 $\times 10^{-16} \text{m}^3/\text{s}$

Fig. 8.

Title: HIGH-POWER BLUE AND GREEN LIGHT LASER
GENERATION FROM HIGH-POWERED DIODE LASERS

Inventor: Ruey-Jen Hwu
Docket No.: HWUJ122333

10/18

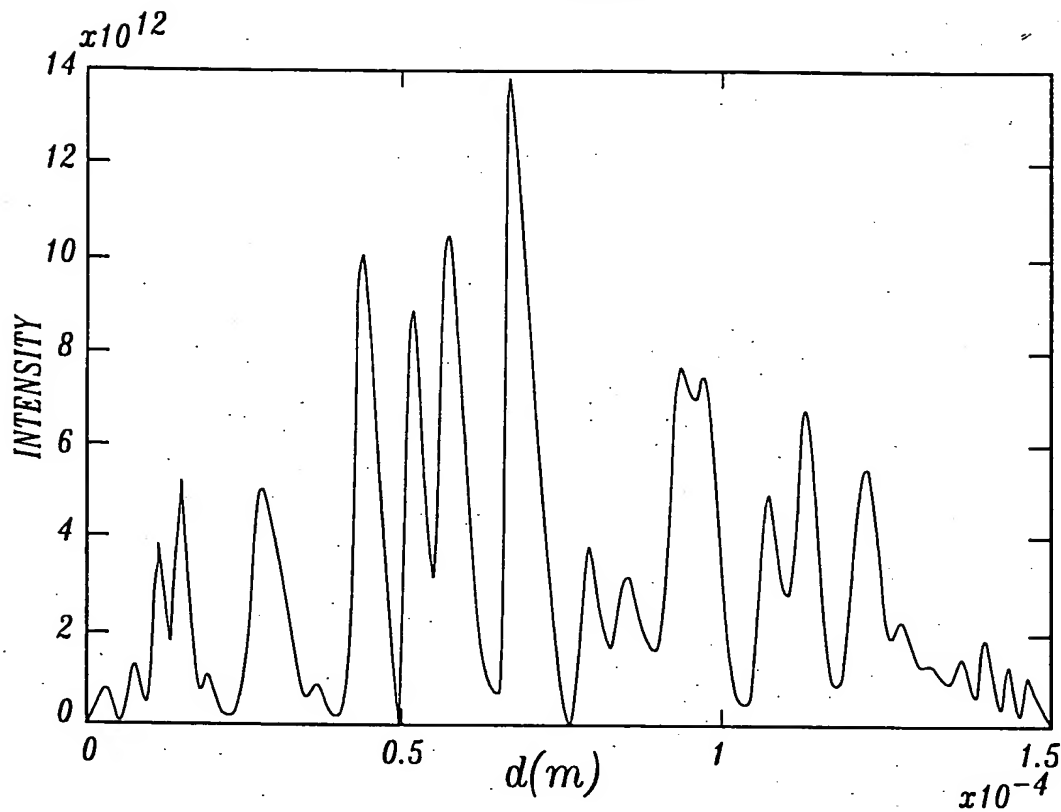


Fig. 9.

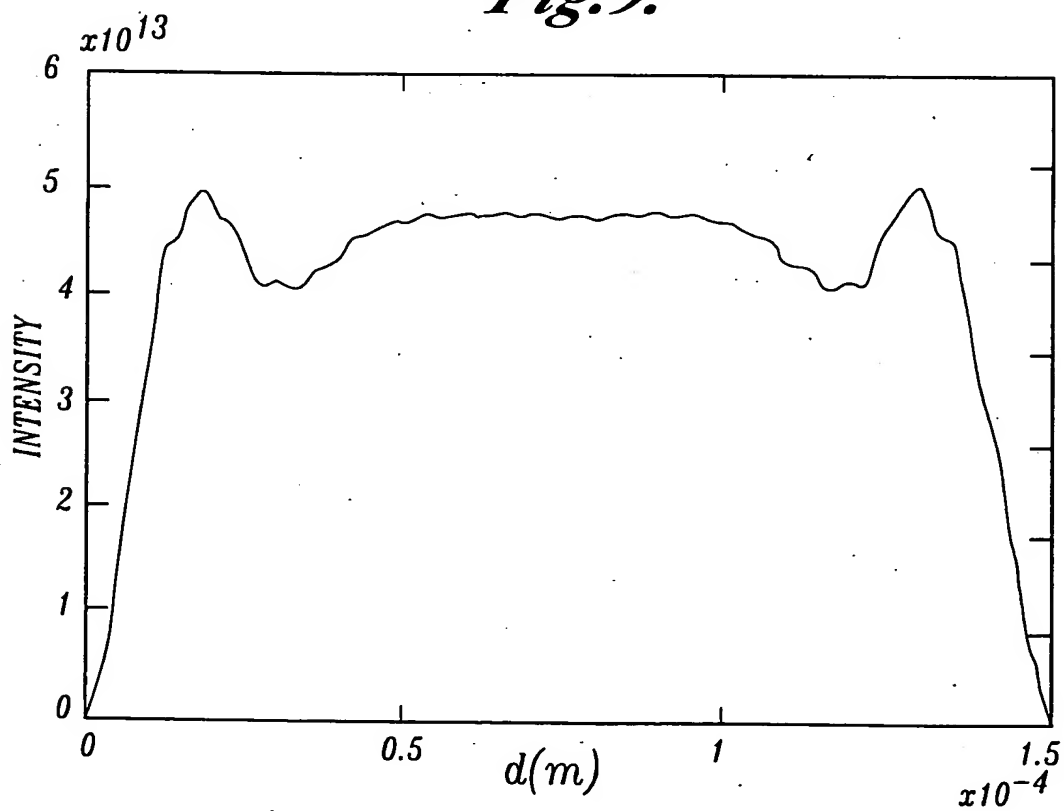
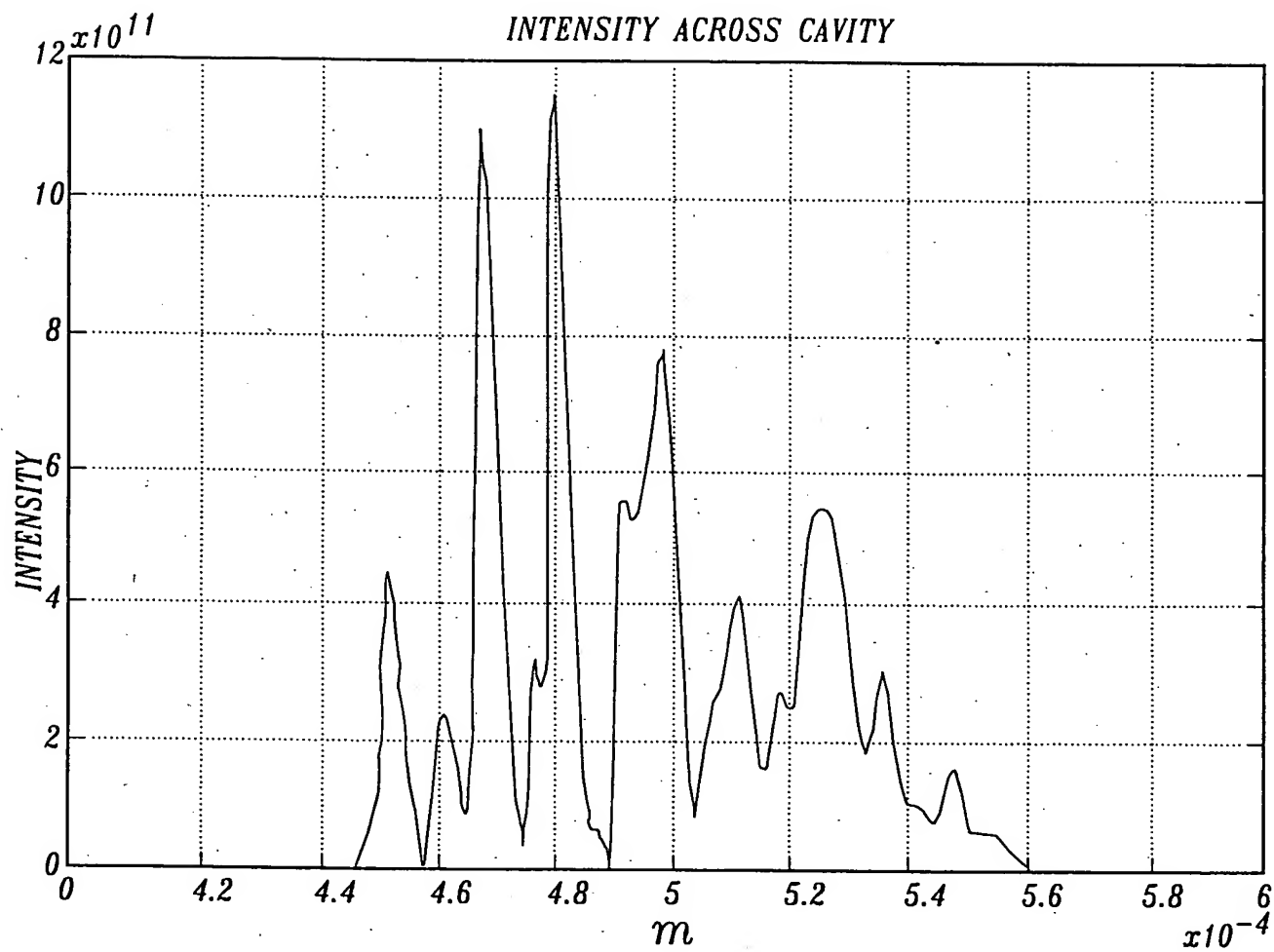


Fig. 10.

Title: HIGH-POWER BLUE AND GREEN LIGHT LASER
GENERATION FROM HIGH-POWERED DIODE LASERS

Inventor: Ruey-Jen Hwu
Docket No.: HWUJ122333

11/18



12/18

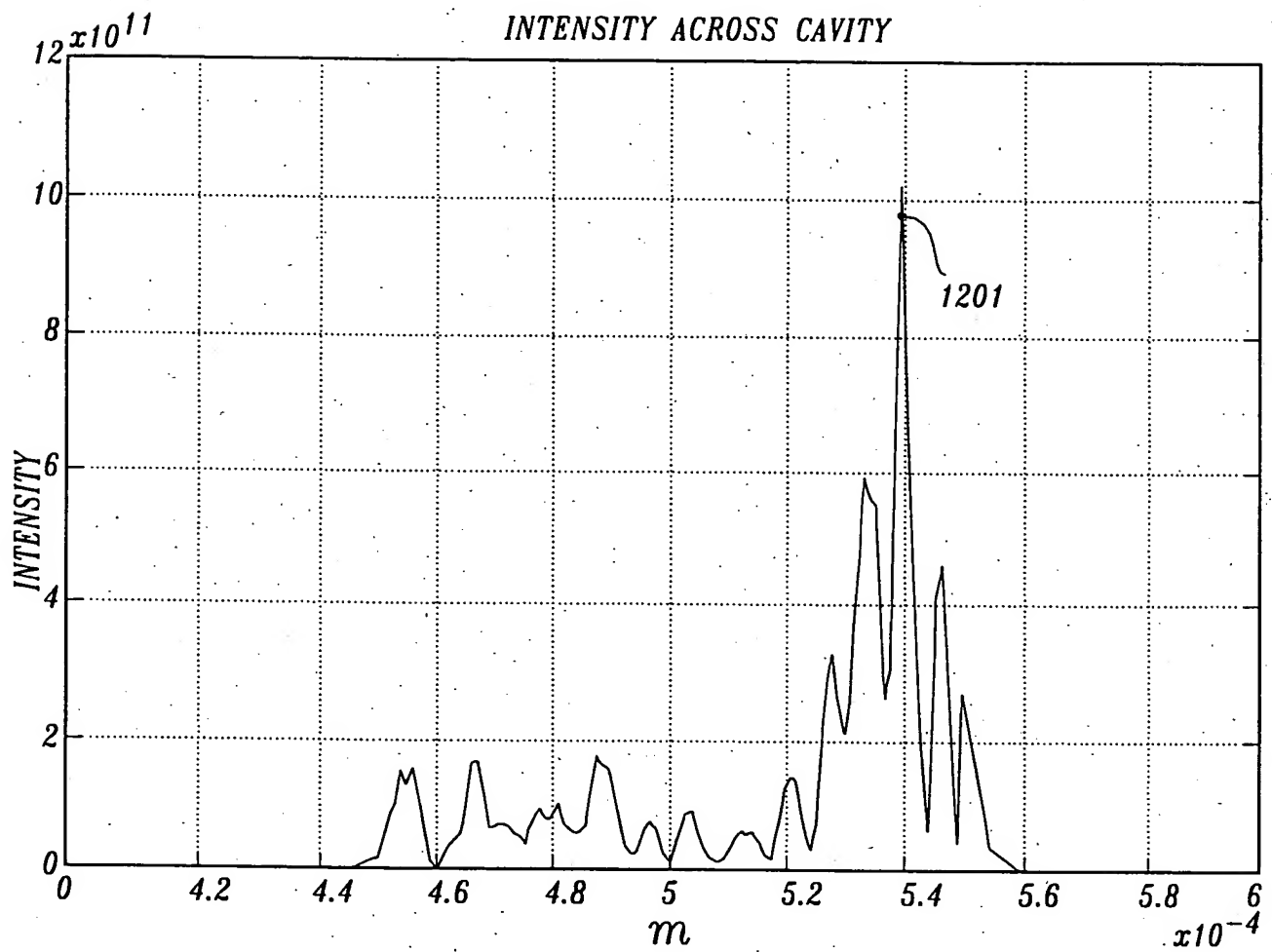


Fig. 12.

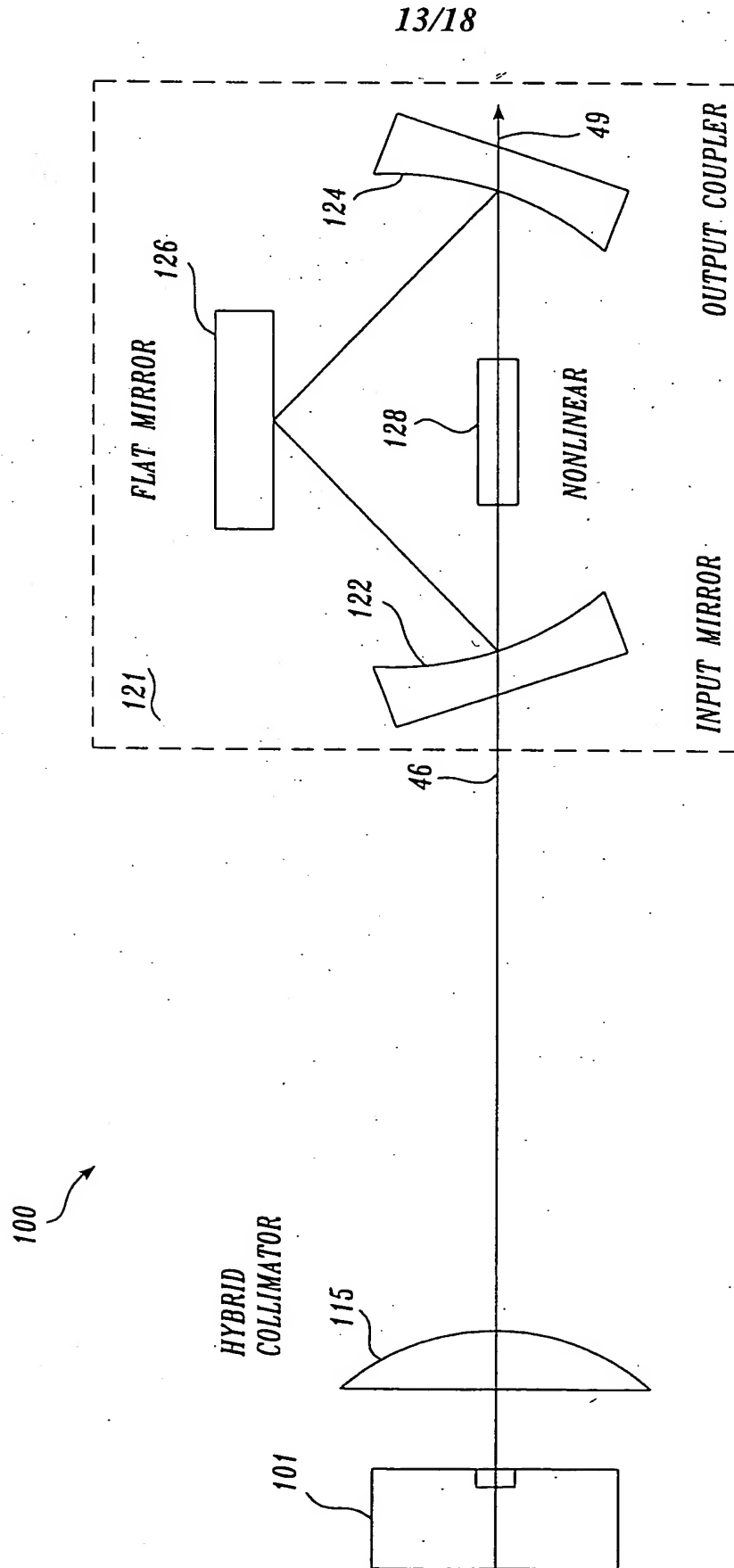


Fig. 13.

14/18

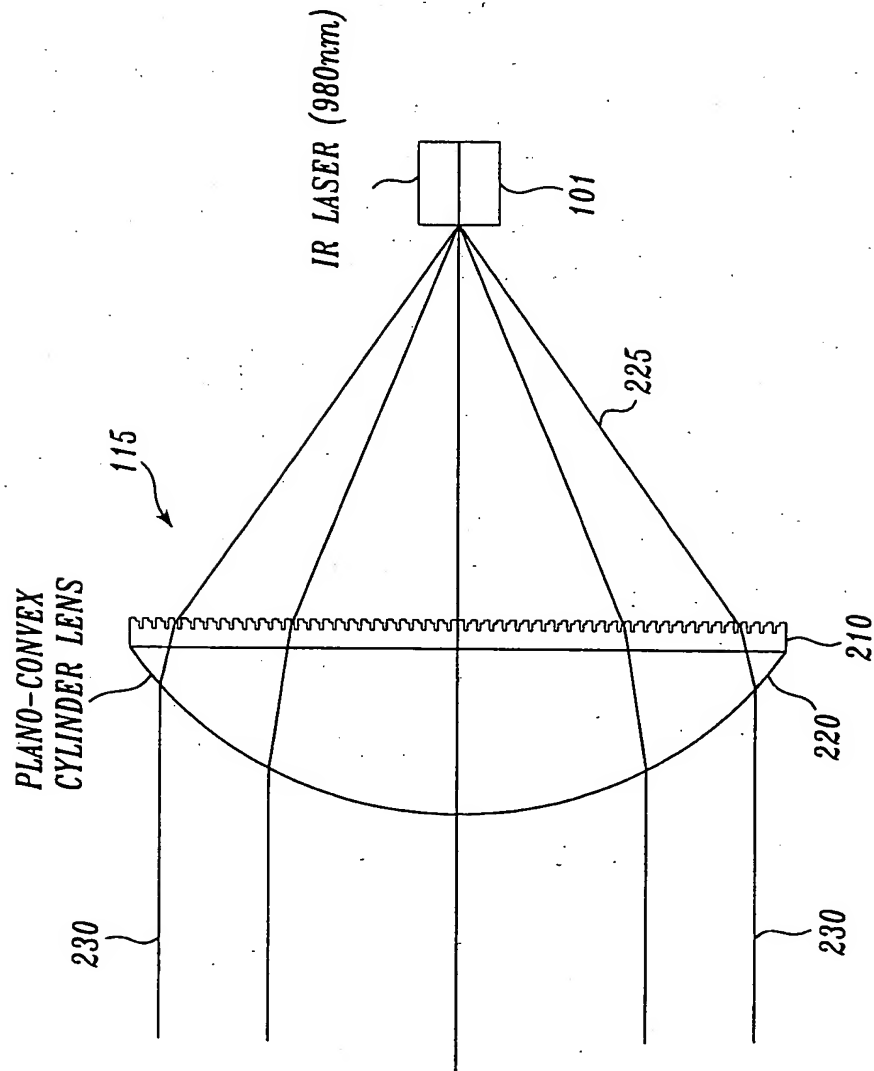


Fig. 14.

15/18

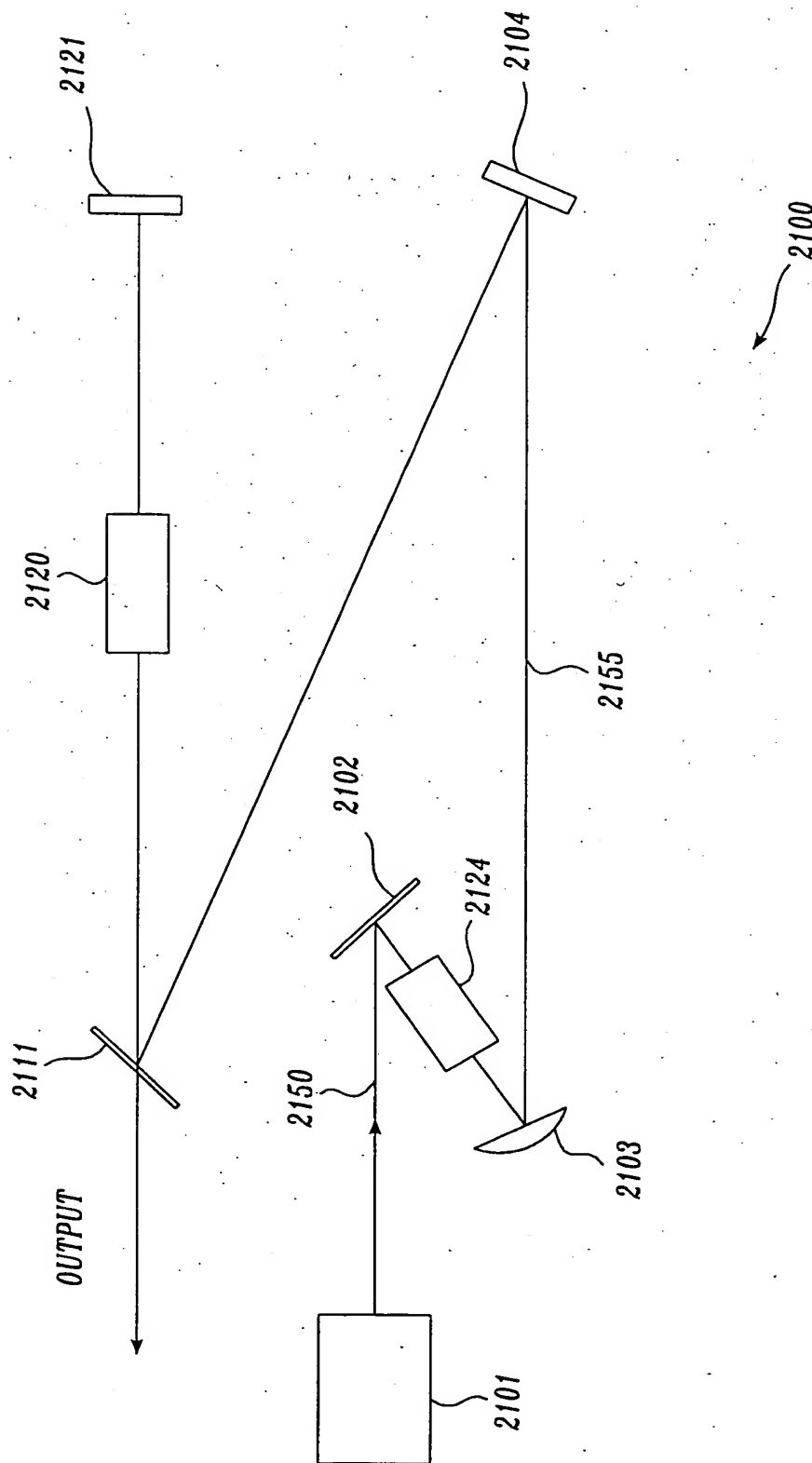


Fig. 15.

16/18

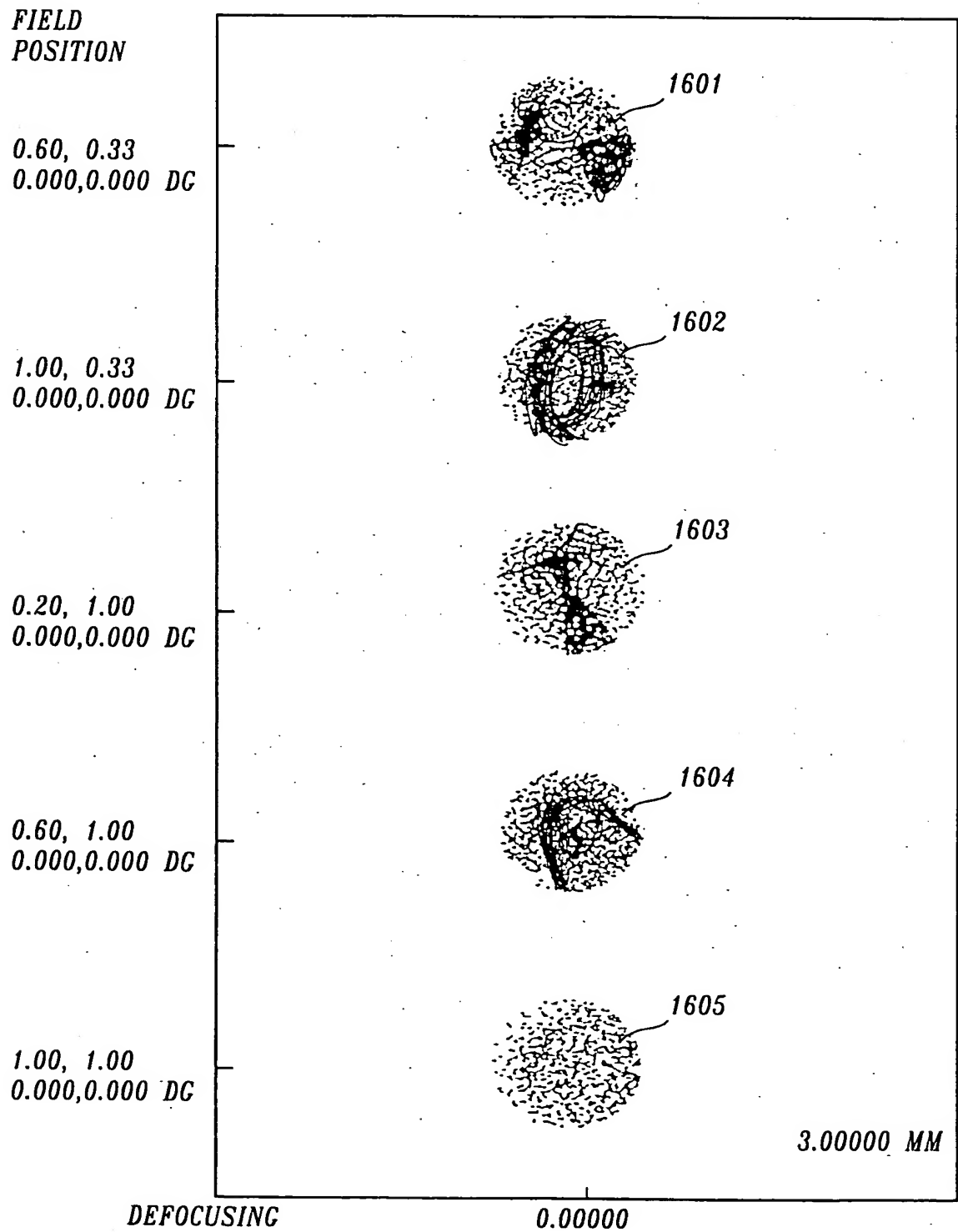


Fig. 16A.

17/18

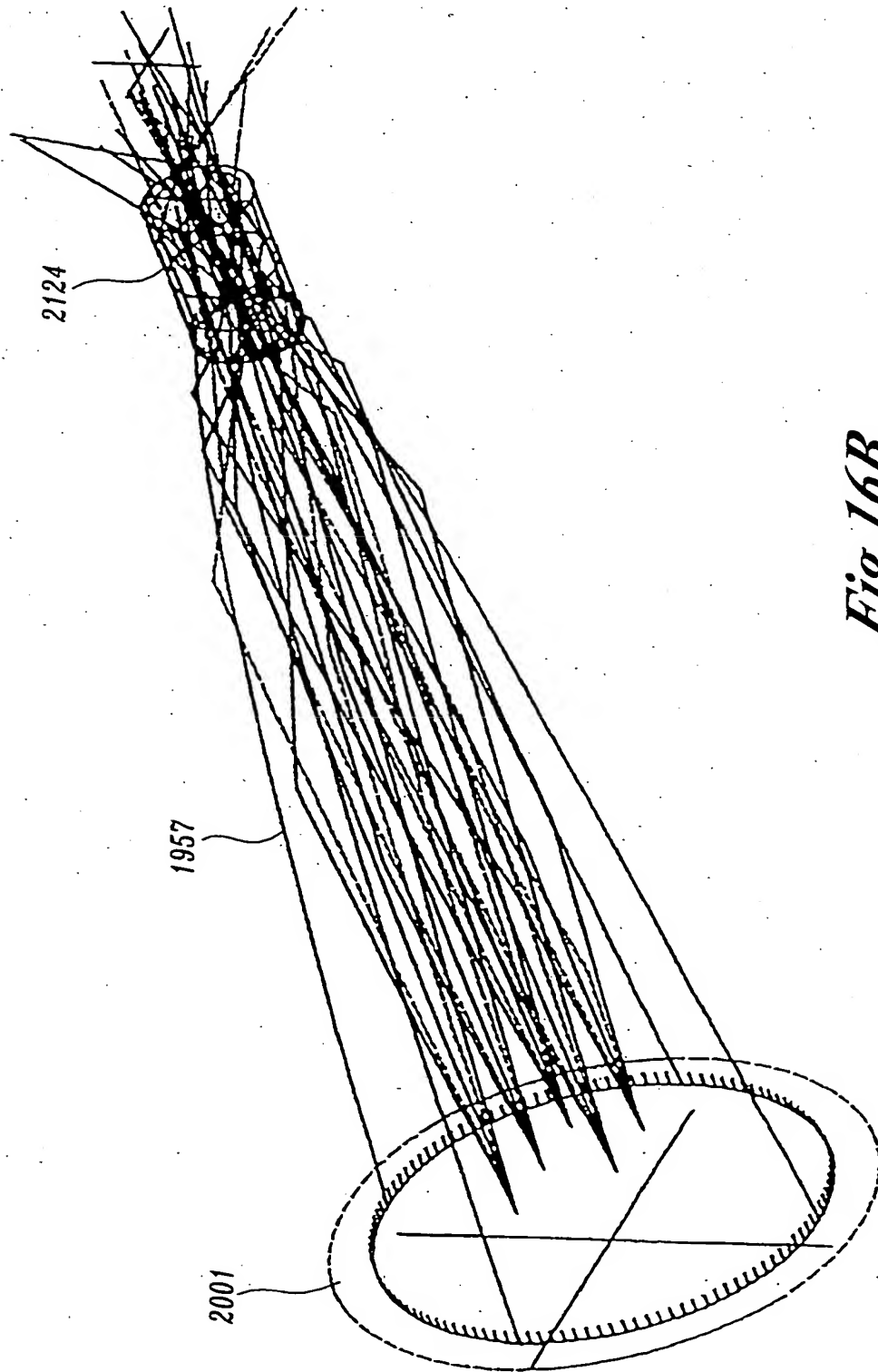


Fig. 16B.

18/18

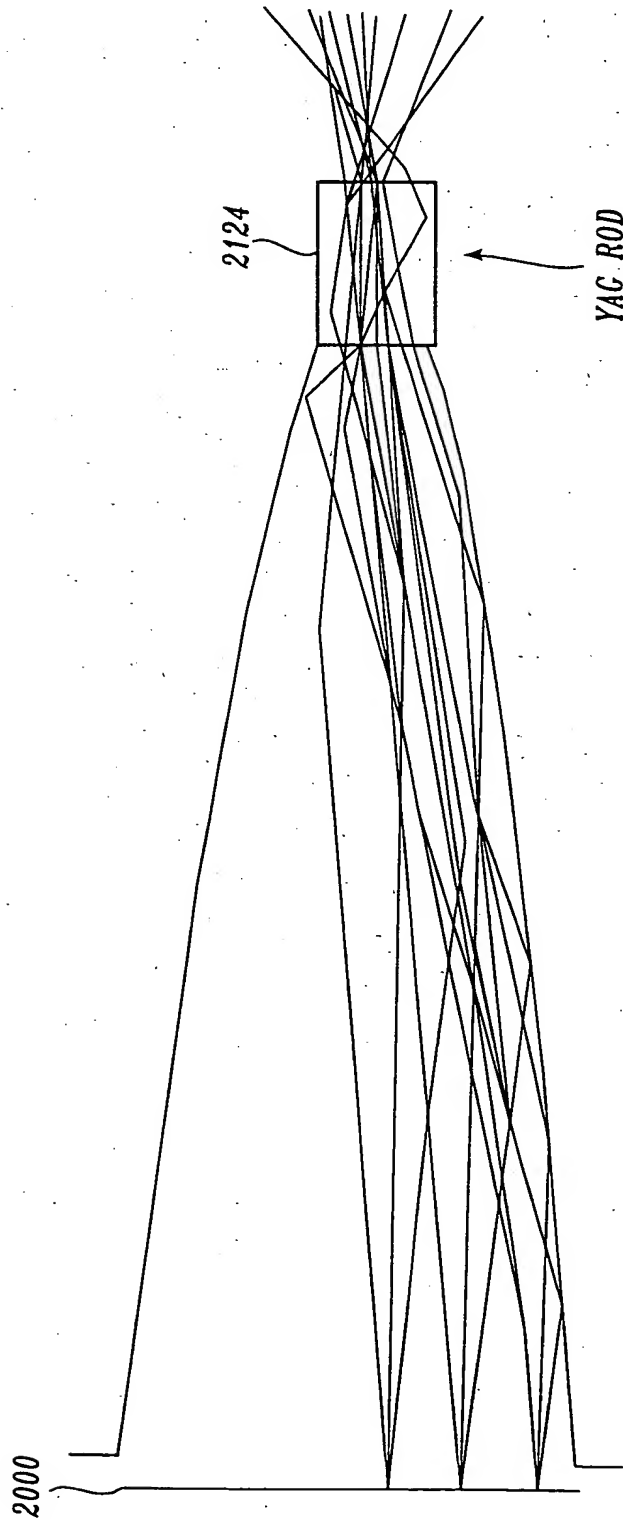


Fig. 16C.